

Title (en)

DRIVING DEVICE CONSISTING OF A MOTOR WITH CHANGING NUMBERS OF REVOLUTION, A VARIABLE HYDROSTATIC TRANSMISSION AND A SHIFTING DEVICE

Publication

**EP 0282010 B1 19920603 (DE)**

Application

**EP 88103639 A 19880308**

Priority

DE 3707495 A 19870309

Abstract (en)

[origin: EP0282010A2] A drive device, consisting of a drive motor (1), whose speed can be varied by an operating member, an adjustable hydrostatic transmission (26) with a pump (3) and a hydraulic motor (5) having a variable supply and/or scavenge volume, a multiple gear transmission (7), which is connected downstream of the hydrostatic transmission (26) and whose gear can be changed particularly under load, a control device (20) being allocated to the hydrostatic transmission (26), and an operating element (9) to initiate a gear change being provided, is to be designed such that, while ensuring a simple control concept, a subjectively good gear-change response is produced, even without costly additional devices having to be used in the control response of the continuously variable hydrostatic transmission (26). This is achieved by a device (13, 14) which confirms the transmission direction of the power transmitted between the drive motor (1) and the multiple gear transmission (7) being allocated to the control device (20), by the control device (20) adjusting the transmission ratio of the hydrostatic transmission (26) in the direction of reducing the output drive speed of the hydraulic motor (5) after the initiation of a gear change into a lower gear (I), when power is being transmitted from the multiple gear transmission (7) to the drive motor (1), and by the gear change process taking place at the earliest when reaching the situation that power is transmitted from the drive motor (1) to the multiple gear transmission (7). <IMAGE>

IPC 1-7

**F16H 47/02**

IPC 8 full level

**F16H 47/02** (2006.01); **F16H 61/42** (2010.01); **F16H 61/421** (2010.01); **F16H 61/431** (2010.01); **F16H 61/46** (2010.01); **F16H 61/462** (2010.01)

CPC (source: EP US)

**F16H 47/02** (2013.01 - EP US); **F16H 61/421** (2013.01 - EP US); **F16H 61/431** (2013.01 - EP US); **F16H 61/462** (2013.01 - EP US); **F16H 2306/48** (2013.01 - EP US); **Y10T 74/19163** (2015.01 - EP US)

Cited by

CN104154201A; EP1936243A1; EP1020314A3; CN113580913A; CN109723787A; EP2952783A1; EP0719968A1; US5678463A; DE102013208951A1; US7983825B2; FR2847525A1; FR2644215A1; US5159992A; DE10354194B4; WO2015135672A3; WO2007048631A1; WO2005111476A1; US8185280B2

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

**EP 0282010 A2 19880914**; **EP 0282010 A3 19900509**; **EP 0282010 B1 19920603**; DE 3871561 D1 19920709; US 4947687 A 19900814

DOCDB simple family (application)

**EP 88103639 A 19880308**; DE 3871561 T 19880308; US 16577588 A 19880309